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Monetary Policy

A Rough Re-entry:

A Comment on Recent Bank of Canada Policy

by

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During the past 18 months, monetary conditions in Canada have, by some measures, become markedly easier. Evidence that inflation has turned down decisively, continuing signs of weakness in the real economy, and the strength of the Canadian dollar have convinced financial markets, with the encouragement of the Bank of Canada, to bring nominal interest rates down. Real — that is, inflation-adjusted — interest rates remain high, however, and over the past two weeks the Bank's willingness to accommodate even lower short-term nominal interest rates has been tempered by a selloff of the Canadian dollar.

To respond in this way to pressures from foreign-exchange markets is, in present circumstances, inappropriate. The Bank of Canada's first and foremost task is to produce money growth that is consistent with stable prices. At the moment, this means allowing money growth that is rapid enough not only to accommodate the increase in money demand associated with the long-term noninflationary expansion of the economy's potential output, but also to meet the once-and-for-all increase that is the result of lower interest rates.

The relatively rapid growth of M1 — a key measure of Canada's money stock — that occurred over the year to September was encouraging. Ominously, however, M1 dropped sharply in October. It is important that the Bank (i) keep money growth as the centerpiece of monetary policy in coming months; (ii) ensure that M1 growth is restored and then maintained; and (iii) not let a desire to fine tune the level of the exchange rate produce an inappropriate tightening of monetary conditions in Canada.

Economic and Monetary Developments since Early 1990

The Change in the Economic Climate

The Canadian economic landscape has changed markedly in the past 18 months. In the spring of 1990, Canada's production of goods and services was pushing against the limits of the economy's capacity, following a three-year boom. Now, output, though growing again at a rather subdued pace, is well below potential, following a dramatic slump last winter.

A year and a half ago, inflation appeared well entrenched in the Canadian economy, and most forecasts made then embodied assumptions of an underlying rate of about 4½ percent persisting for several years into the future. Inflation has been running at an annual rate of about 2 percent since the beginning of the year, however, and many forecasters now expect the Bank of Canada's first inflation target — a 3 percent annual increase on the Consumer Price Index by the end of 1992 — to be met with room to spare.

The Change in Monetary Conditions

The change in Canadian monetary conditions has also been pronounced. The most widely watched indicator of Bank of Canada policy, the Bank Rate, rose above 14 percent in May 1990. Yields on long-term government bonds stood at about 11 percent at that time, and this sharp "inversion" of the term structure of interest rates was symptomatic of a severe monetary squeeze and a warning of coming economic weakness. The Bank Rate now stands below 8 percent, some 1.2 percentage points below long-term bond yields, so that the term structure has now been restored to its normal "positive" shape.

And, critically, the M1 monetary aggregate — currency in the hands of the public plus demand deposits at chartered banks — was shrinking rapidly in the spring of 1990. This signaled that the Bank of Canada's policy of tight money — intensified in the wake of a run on the Canadian dollar in foreign-exchange markets that had occurred in January 1990 — had choked off the creation of liquid money in Canada's banking system. Over the year to this past September, on the other hand, easier monetary conditions were reflected in growth of M1 in the 7 percent range.

Lessons of the Past 18 Months

Canada's experience over the past year and a half highlights some important features of Canadian monetary policy.

First, M1 is a key — perhaps the single most reliable — indicator of Canadian monetary conditions. It responds rapidly to changes in policy and signals future changes in output and inflation with a fair degree of precision. Although there is controversy about its precise role in the transmission of monetary impulses to the Canadian economy, M1's tendency to lead changes in output — which, in turn, lead changes in the rate of inflation — has been reconfirmed by recent experience.[1]

Second, the Bank of Canada's influence over the short-term path of output is powerful, and tends to peak after a lag of some six months. The severe monetary tightening in early 1990 was followed by back-to-back declines of almost 5 percent (at seasonally adjusted annual rates) in real gross domestic product (GDP) in the fourth quarter of 1990 and the first quarter of 1991.

Third, the Bank of Canada's influence over the medium-to-long-term path of Canadian inflation is equally powerful, after a more variable lag averaging about 18 months. The progressive tightening of monetary policy, as evidenced by M1 growth since 1988, had already produced slower inflation during 1990. Now, following the early 1990 crunch, inflation appears to have broken downward decisively.

Recent Developments in Bank Lending and Money Growth

The slow recovery of corporate profits and employment over the past six months is a matter for concern. A strong case can be made, however, that these are lingering effects of a crunch that is now substantially over — that Canada has paid most of the price for a highly desirable transition to lower inflation and is now in a position to reap continuing benefits in the form of lower interest rates, less distortionary taxes, and faster growth of potential output.

But recent developments in the financial sector raise additional worries. Since May, increases in bank lending have been concentrated exclusively in mortgages. Personal loans, despite edging up marginally in October, have fallen at a 3.9 percent annual rate since May; business loans are down 2.8 percent over the same period. Our previous work has shown that, in the past, slow or negative credit growth has been followed in short order by slow or negative money growth.[2]

In October, M1 dropped sharply — by fully 3 percent in the month — its first decline in over a year, knocking its year-over-year growth rate down to 2.4 percent from September's 7.1 percent rate. If this decline is not just a one-month blip — and its size suggests that it may not be — then it raises the possibility that, despite the appearance of falling nominal interest rates, monetary policy has become more restrictive.

Declines in lending and M1 suggest that the inflation, income, and profit expectations of households and businesses may be deteriorating faster than nominal interest rates are falling, raising the specter of renewed weakness in the economy in early 1992 and of more deflationary pressure than is needed for the Bank of Canada to continue toward its goal of price stability. And the appreciation of the Canadian dollar to around 89 cents U.S. is consistent with the view that monetary policy has been tight. On this interpretation of the evidence, any attempt by the Bank to resist the dollar's recent tendency to fall back by raising short-term interest rates would involve tightening monetary policy further and, in the circumstances, inappropriately, as we shall now explain.

Calibrating Monetary Policy

The Appropriate Long-Term Growth Rate for M1

The C.D. Howe Institute firmly supports the Bank of Canada's pursuit of price stability,[3] and we are on record as arguing that, barring shifts in demand for liquid money, a growth rate for M1 of about 3 percent annually would be consistent with noninflationary growth of the Canadian economy.[4] Why, then, do we not welcome a dip in M1 that brings year-over-year growth down to about 2½ percent from a growth rate well above our recommended rate?

Three percent growth in M1 would be a reasonable target in a steady state in which inflation was close to zero, the economy was

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expanding in line with long-term potential growth, and interest rates were stable. Under such circumstances, demand for M1 — which is positively related to the price level and the volume of real activity and inversely related to interest rates — would likely be rising at around 3 percent annually. Accordingly, monetary policy that produced 3 percent growth in the supply of M1 would accommodate real economic growth without threatening a re-emergence of inflation.

The Re-entry Problem

The situation is more complicated, however, when — like the Canadian economy at present — the economy is not in a steady state. Rather, it is in a process of transition — sometimes referred to as "re-entry" — from a situation of high inflation and high interest rates to one characterized by low inflation and low interest rates. The demand for M1 is sensitive to interest rates. When they are high, holders of the noninterest-bearing currency and demand deposits that make up this aggregate forgo income by not holding interest-bearing assets instead. Hence, they hold as little M1 as they can conveniently manage. When interest rates are lower, the sacrifice of income is smaller, and more M1 balances are held.

Therefore, during re-entry, when interest rates are falling, money demand grows more quickly than usual. Accordingly, a central bank should, for a time, promote growth of the money supply faster than would be consistent with the new, lower rate of inflation over the long term.[5] Difficulties in calibrating monetary policy during re-entry arise because it is not always clear what is the appropriate "base line" from which to measure money growth, and because financial innovations may exert unexpected influences on money demand over and above those arising from a changing level of interest rates.

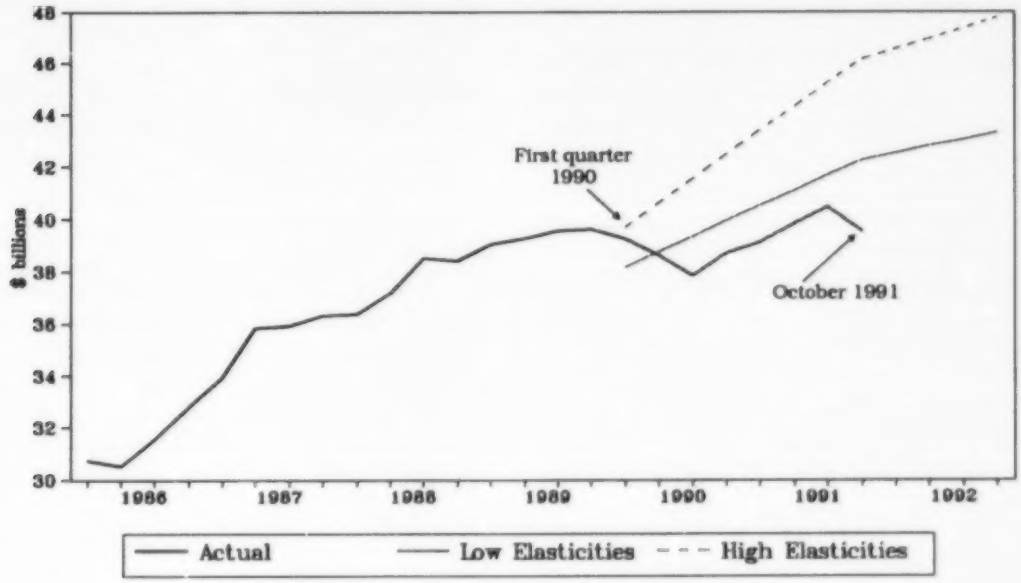
This is Canada's current situation. Actual real economic growth has been roughly zero over the past 18 months, but the economy's productive potential has continued to grow. Also, general — if slower — inflation and the introduction of the goods and services tax have raised the price level. And since the peak of the monetary crunch in the spring of 1990, short-term nominal interest rates have fallen by some 6 percentage points. Even under quite conservative estimates of the responsiveness of M1 demand to interest rate changes, a drop of this magnitude can be expected to bring about a substantial upward shift in M1 demand. If the Bank of Canada does not allow M1 to grow fast enough to meet this higher demand and that associated with growth in the economy's productive potential, monetary policy will exert renewed contractionary pressure on the economy.

How Much Has M1 Demand Grown since Early 1990?

The evident importance of M1 in the transmission of monetary impulses to the economy lends urgency to the question of how fast it should be growing. One way of approaching this problem is to take as a benchmark a recent period when the amount of M1 available to be held appears to have been at a level consistent with the demand for it implied by the values of the key variables affecting that demand, and then to calculate the changes in M1 that subsequent developments in real growth, inflation, and interest rates would indicate were necessary to keep supply equal to demand.

Figure 1 illustrates the results of such an exercise. It uses a five-quarter average of M1 centered on the first quarter of 1990 as a benchmark, and projects forward low- and high-growth paths, starting 2 percent on either side of that point.[6] Both growth paths assume that the elasticity of M1 demand with respect to the price level is 1 — that is, other things being equal, M1 demand growth is equal to the rate of inflation. The low-growth path assumes that the elasticities of M1 demand to real GDP and short-term interest rates are 0.7 and –0.3 respectively; the high-growth path uses figures of 1.0 and –1.0.[7]

Figure 1: ***M1: Actual Path and Desirable Range for Smooth Re-entry***



Sources: Bank of Canada; Statistics Canada; C.D. Howe Institute calculations.

Recent M1 Growth Looks Too Slow

The results depicted in Figure 1 suggest that the strong growth in M1 over the year to September was entirely appropriate. Far from threatening any renewed outbreak of inflationary pressure, that growth at best merely accommodated — and probably should have done so more aggressively — the increase in M1 demand that growth in nominal spending and declines in interest rates would have been expected to bring about.

Of more immediate interest, however, is another implication of these calculations: that the decline in M1 in October was not appropriate. Even on a conservative estimate of the responsiveness of M1 demand to interest rates, the current level of M1 looks low relative to M1 demand. If this weakness is connected, as we suspect it is, to the slump in bank lending that has been evident since late spring, monetary policy has been and remains inappropriately tight. The decline in nominal interest rates since last spring would indicate the opposite, but, in our view, this decline has not been fast enough. Continuing high real interest rates and an appreciating dollar are added evidence in favor of this view, and an easier setting for monetary policy over the next few months seems desirable.

Smoothing the Re-entry

We believe that the benefits of price stability are great enough to justify the costs involved in bringing inflation down. On this point, our support for the Bank of Canada is unwavering. But there is no virtue in subjecting Canadians to more pain than the task at hand requires. Different assessments of the amount of progress that has already been made against inflation will lead to different assessments of the amount of additional pressure from tight monetary policy that is needed to reduce it further.

But even the most pessimistic reading of recent inflation indicators shows a convincing decline, and little sign that this phenomenon is temporary.

The immediate task facing the Bank of Canada is, therefore, to manage the transition to a low-inflation, low-interest-rate environment as smoothly as possible. In our view, the most important tool in this task is the same one that was used to curb inflation in the first place: appropriate rates of money growth. Rising M1 demand in an environment of falling interest rates dictates a need for higher M1 growth rates, at least over the short term. If the drop in M1 in October signals a break in the trend of M1 growth evident over the previous 12 months, we would strongly urge the Bank to ease sufficiently to get it growing again.

The exchange rate is of distinctly secondary importance here. When the Bank was trying to bring inflation under control and the economy was booming, an appreciating dollar was an early sign of its success, and a tendency for the exchange rate to fall could legitimately be read as an indication that policy needed to tighten up further. Even so, hindsight suggests that, in early 1990, the Bank may have overreacted to the foreign-exchange market.

Now that inflation is under control and the economy is weak, the exchange rate is, more than ever, an unreliable policy indicator. To permit money growth to remain inappropriately low as a side effect of an attempt to prop up the exchange rate would be damaging to the recovery and would yield few, if any, benefits on the inflation front. It is a trap to be avoided.

Notes

1 For a detailed examination of the lags involved in the transmission of monetary impulses to the Canadian economy, see David E.W. Laidler and William B.P. Robson, *Mainly Money: The Cause of Canadian Inflation*, Inflation Monitor 4 (Toronto: C.D. Howe Institute, 1990); and idem, *Money Talks — Let's Listen*, C.D. Howe Institute Commentary 26 (Toronto: C.D. Howe Institute, 1991).

2 See Laidler and Robson, *Money Talks — Let's Listen*. Note that over the past few months, the term structure of interest rates has shown a tendency to flatten out as well. The yield spread between long-term government bonds and treasury bills, which exceeded 170 basis points in May — indicative of good prospects for continued expansion — fell back to 125 basis points at the end of September. More recently, it has been in the 150 basis-point range.

3 The case for price stability as a policy target and a review of some of the economic and political aspects of the debate can be found in Richard G. Lipsey, ed., *Zero Inflation: The Goal of Price Stability*, Policy Study 8 (Toronto: C.D. Howe Institute, 1990).

4 See Laidler and Robson, *Mainly Money*.

5 On Canada's "re-entry" during the 1982–85 disinflation, see Peter Howitt, *Monetary Policy in Transition: A Study of Bank of Canada Policy, 1982–85*, Policy Study 1 (Toronto: C.D. Howe Institute, 1986).

6 An ordinary least squares regression of (log) real M1 on (log) real GDP, 90-day corporate paper rates, and a time trend since 1983 suggests this period as a reasonable equilibrium benchmark. This choice is corroborated in Francesco Caramazza and Chad Slawner, "The Relationship Between Money, Output and Prices," Bank of Canada Working Paper 91-4 (Ottawa, October 1991), pp. 27–28. Consideration of growth rates would make late 1989 a more attractive choice — annualized growth of M1 averaged slightly over 3 percent during 1989, whereas it had turned negative by early 1990. To the extent that our benchmark level is too low, our subsequent comments about inappropriately slow M1 growth should be more forceful.

Note that our projected growth paths kink to lower rates at October 1991. This indicates that the money growth needed to accommodate lower interest rates is temporary, so that, once such accommodation has been accomplished, M1 growth should thereafter be held at 3 percent per annum. Moreover, we are reluctant to color our projections by assumptions about the future behavior of interest rates. If interest rates continue to fall, it would, of course, be appropriate to delay the return to 3 percent M1 growth.

7 The high-growth elasticities are consistent with recent results published by the Bank of Canada (see ibid., p. 27). Other specifications, such as the regression mentioned in the previous note, give slightly lower figures.

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